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Singapore's Us2.ai expands multi-modality echocardiography AI analytics reach

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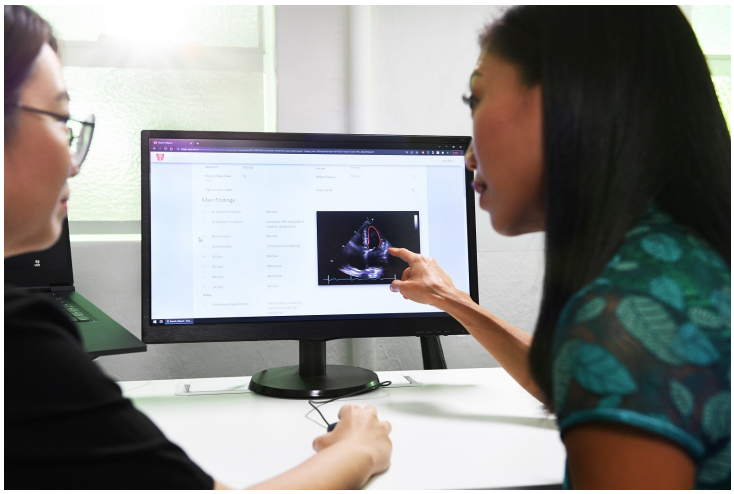
The automated clinical workflow solution recognizes and analyzes 2-dimensional and Doppler echo images for comprehensive cardiac measurements needed for the diagnosis, prediction and prognosis of heart disease and pulmonary hypertension



Us2.ai, a Singapore-based medtech firm has received CE Mark clearance for Us2.v1, a completely automated decision support tool for echocardiography. This follows US FDA clearance in 2021 and Health Sciences Authority Singapore clearance in 2022.

Us2.v1 is deployed for clinical use in UK and across Europe, US, Canada, Australia, New Zealand and Singapore. The patented, automated clinical workflow solution recognizes and analyzes 2-dimensional and Doppler echo images for comprehensive cardiac measurements needed for the diagnosis, prediction and prognosis of heart disease and pulmonary hypertension.

"These approvals for clinical use across Europe, in the UK and in our home country of Singapore will help accelerate the roll out of Us2.v1 as an important support system for cardiologists," said James Hare, CEO and co-founder of Us2.ai.

"Heart disease is the leading cause of death globally. Us2.v1 creates a complete and fully automated patient report with editable annotations, conclusions and comparisons to international reference guidelines to ensure cardiologists are armed with all the facts to detect heart issues early and with ease," added James.

Us2.ai is also recognized for 'Clinical Workflow to Diagnose Heart Disease Based on Cardiac Biomarker Measurements and AI Recognition of 2D and Doppler Modality Echocardiogram Images'.

Us2.v1 automated measurements include 2-dimensional (cardiac volumes, all 4 chambers of the heart), M-mode (e.g. tricuspid annular plane systolic excursion), spectral Doppler (blood flow across all valves, both PW and CW measurements) and tissue Doppler; thus covering the vast majority of standard measurements for adult transthoracic echocardiography. Furthermore, Us2.v1 measurements were completely reproducible for a given patient study, with image processing/analysis algorithm computation time of approximately two minutes per study.